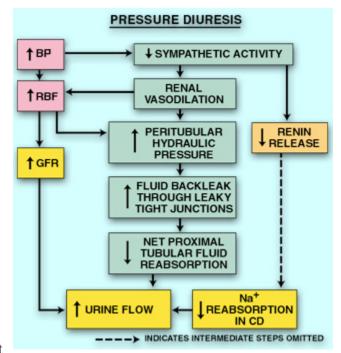


Pressure Diuresis

This phenomenon, also known as pressure natriuresis, is associated with increased mean arterial pressure and plays an important role in the long term regulation of EBV and blood pressure. It is the result of an interaction of several factors. The imperfect nature of autoregulation of GFR and of GT balance contribute to pressure diuresis. The associated decrease in sympathetic activity and increased macula densa flow inhibit renin secretion and decrease the effects of angiotensin II and aldosterone.

Another factor is the effect of increased perfusion pressure to raise the intra-renal ISF hydraulic pressure which will then decrease net fluid reabsorption by enhancing back-flux through the leaky tight



junctions of the proximal tubule. The resulting diuresis will function to decrease the ECF volume (and the EBV) and return arterial pressure towards normal.

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